

AMERICAN
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STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, JULY 16, 1859.

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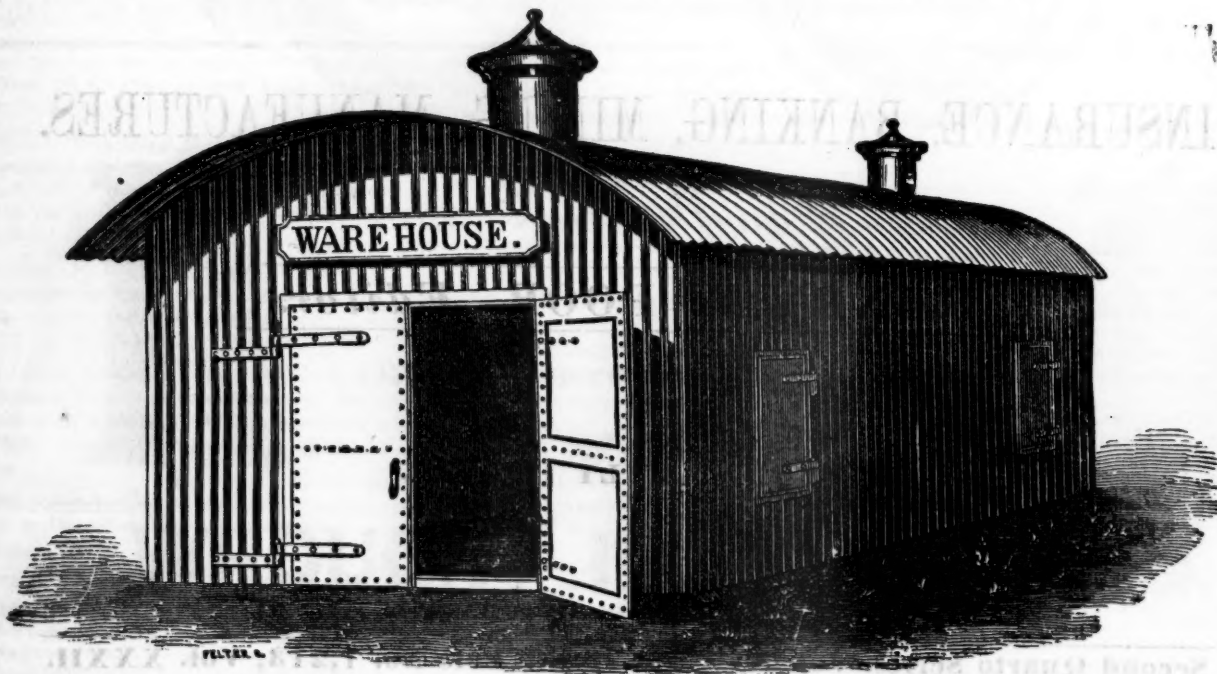
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American Railroad Journal.

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New York, Saturday, July 16, 1859.

Railroads in British India.

A "Report on the Construction of Railways in India," has been laid before Parliament by a committee appointed to examine into the subject. From this document we learn that there are seven separate companies engaged in constructing lines in India, under the guarantee of the Indian government. These are as follows:

1. The *East India Company*, whose line extends from Calcutta via Rajmahal and Allahabad to Delhi, or Meerut, with a branch from Mirzapoor, to meet the line of the Peninsula Company at Jubbulpoor. The length of this line will be 1,400 miles, and it is already completed to Patna. The cost has hitherto been about £12,000 per mile.

2. The *Great Indian Peninsula Company's* road from Bombay in a north-easterly direction to Jubbulpoor, where it will form a junction with the East India line, and in a south-easterly direction via Poonah and Sholapoor, to meet the Madras line at Bellary. It is already completed to Poonah.

3. The *Madras Company* whose line from Madras via Cuddapah and Bellary (junction of the Great Indian Peninsula), will extend in a western direction to the Malabar coast at, or near, Beypoor.

4. The *Bombay, Baroda and Central India Company*, the line belonging to which extends from Bombay via Surat, to Baroda and Ahmedabad, and which, for several miles out from Bombay, uses a common line with the Peninsula Company.

5. The *Scinde and Punjab Company*, which is constructing a line from Kurrachee to Kotree on the Indus, and from Mooltan to Lahore, with a connection between Kotree and Mooltan by steam navigation.

6. The *Eastern Bengal Company*, with a line from Calcutta to Dacca, and a branch to Jessore.

7. The *Great Southern Company*, with a line from Salem via Trichinopoly to Negapatam, and southward to Madura and Tinnivelly.

In all British India there are now 12,000 miles of line projected, and it is estimated that the construction of the whole will average £6,000 per mile, or £72,000,000; but the probability is, that it will cost, at least, 50 per cent. more.

The cost, as estimated for each of the several lines above enumerated, is stated at the following sums:

East India	£12,731,000
Great Indian Peninsula	11,000,000
Madras	6,000,000
Bombay, Baroda and Central India	2,000,000
Scinde and Punjab	2,500,000
Eastern Bengal	1,000,000
Great Southern	2,000,000

The chief objects sought to be attained in the construction of railroads in India are alike military, political, and commercial. The commercial element, however, has always been supreme in determining the locations. In calculating the extent of railroads necessary for India, comparison is made of that country with America and England. In America there was one mile of railroad to every 112 square miles of territory; in the United Kingdom, one mile to every 14 square miles; and in the manufacturing counties of Britain, one mile to every 5 square miles. But whilst in America there were only about 9 inhabitants to every square mile, in India there were 124 to the square mile. And thus it is obvious that the ratio of the importance of introducing railroads into India is fourteen to one as compared with America.

The first Indian railroad project was conceived in the latter part of 1844, by Mr. McDonald Ste-

phenson, who submitted to the Indian government a scheme for a line from Calcutta to the north-west of India; and almost simultaneously Mr. Chapman submitted a scheme for a railroad from Bombay towards the interior. In 1845 a company was formed for the construction of a line from Madras to Arcot. These several plans have now been matured, and the result is that the railroad is to be spread over the great central peninsula of Southern Asia like a net work, giving outlets to the interior, and facilities to communication between the governments in every direction, and should it hereafter unhappily become necessary, to the rapid movement of troops and warlike stores. For the construction of all these lines, the Indian government has given ample guarantee, and is bound to see that the interest on the outlay is satisfied. In relation to this, the report states that the several companies have the power of surrendering the works at any time after the line is opened, upon giving six months' notice to the government, and the East India government undertake to repay the whole amount that has been expended by the railway company. The East India government have the power, within six months after the expiration of 25 or 50 years, of purchasing the railways at the mean market value, in London, of the shares during the three previous years. In case the railway companies fail to complete the lines, or to work them satisfactorily, the government is entitled to take possession, and repay within six months the sums expended—the companies to repay the guaranteed interests from the profits of the railway.

The supervision of the government over the proceedings of the companies is of two distinct kinds, viz: That exercised in the person of the official director over the railway boards in London, and that exercised by consulting engineers in India, to whom is committed the charge of superintending on behalf of government all railway operations in that country.

It is difficult to comprehend what a vast revolution these railroads will work in the commercial and industrial economy of the country; and this will affect, in a commensurate ratio, the whole commercial world. England will, of course, reap the lion's share of the profits; but next to that country the United States should rank, and with

prudence on the part of our government, our share in the coming prosperity of India will be of no mean value.

Canals of New York.

We copy the following from the Report of the Chamber of Commerce of the City of New York, in reference to the canals of this State contrasted with those of other countries:

The Erie Canal was opened for navigation through its entire length on the 26th of October, 1855. Previous to that time, the cost of transportation was so excessive that there was scarcely any commerce between the city of New York and the great Lakes. The larger part of the merchandise and products exported from Western New York to the seaboard, was sent down the Susquehanna river to Baltimore, or by the Schuylkill to Philadelphia. Except along the coast, and with the region tributary to the Hudson river and Long Island Sound, New York had no domestic commerce. Her capacious harbor, and proximity to the sea, gave her advantages over any other city in the United States as an *entrepot* for foreign trade, and caused her to be largely used for that purpose.

It was, of course, impossible that a city so situated should long occupy a secondary or subsidiary position. Its facilities for the prosecution of foreign commerce compelled the adoption of means of internal communication. The fact that New York was the chief seaport of the United States, called into existence the requisite means for rendering her the greatest domestic mart. The noble Hudson river afforded the basis of operations. The trade arising from the increasing population and products of the vast region lying in the valley of the Ohio and Mississippi, was the prize to be contended for.

At the time when New York awoke to the necessity of adopting measures for bringing to her wharves this trade, which is now only in embryo, canals were the best media for internal commerce which the skill and genius of man had yet devised. To enable her, therefore, to appropriate the trade to which her position justly entitled her, the Erie Canal was conceived and executed. Its completion at once placed New York in direct communication with the greatest inland seas, and the finest grain-growing regions in the world.

The following statement shows the extent of water communication which was practically opened to New York by the construction of the Erie Canal:

	Length, miles	Breadth, miles	Area, sq. miles
Erie Canal—Alb'y to Buffalo.	363	...	...
Oswego and other lake canals.	666	...	...
Welland Canal.	28	...	...
Lake Ontario.	190	40	7,300
" Erie.	250	45	9,300
" St. Clair.	25	18	300
River.	60	...	...
Lake Huron.	270	145	18,740
" Michigan.	326	602	1,900
" Superior.	320	120	32,100

Thus the whole trade of the fertile region tributary to over 2,500 miles of navigable waters—embracing an area of nearly one million square miles—and the population of which, under the stimulus given by the Erie Canal, has increased from less than half a million to nine millions of inhabitants, was turned, by the completion of this work, from its natural channels, having their outlets far distant from us, into the most capacious harbor on the Western Continent. The slow raft and the toilsome flat-boat—destitute of all the conveniences and appliances of speed, comfort, and promptitude, and traversing, for the most part, uncultivated forests—gave place to the light and convenient canal-boat, whose way laid through a highly cultivated country, full of thriving towns and villages, at a rate of speed, and with a certainty in its time of arrival and departure, as much in advance of the ordinary means of conveyance as the railroad car of the present day is in advance of the stage-coach of half a century ago.

Canals are probably the oldest artificial medium

of what is now popularly called commerce. There is reason to suppose that, in Egypt, they were coeval with the building of the Pyramids; and that without their existence those mysterious structures could not have been reared. Pliny describes the canal of the Pontine Marshes, which extended from the *Forum Appii* to near *Terrecina*, and was completed a. c. 162, as being intended for the double purpose of drainage and navigation.

The honor of bringing the art of canal making to its present state of perfection is generally awarded to James Brindley, the Engineer of the Duke of Bridgewater's Canal, which was opened between Manchester and the River Mersey, in 1761. It would appear, however, that Brindley did not accomplish anything more than was achieved by the Engineer of the Great Canal of China, which was constructed in the reign of the Emperor Yang-ti, who ascended the throne in the year 605 of the Christian era. The distinctive feature of the Bridgewater Canal project was "the determination of preferring one level, which led to the construction of tunnels, aqueducts, and embankments of very considerable magnitude."

The greatest artificial canal in the world—if we look to the cost of construction, the amount of business transacted upon it, and the volume of water it contains—is, undoubtedly, the Erie Canal, in this State. McCulloch, in his *Commercial Dictionary*, speaks of the canal from Amsterdam to New Dieppe, near the Helder—the object of which is to afford a safe and easy passage for large vessels between Amsterdam and the German Ocean—as "the greatest work of the kind in Holland, and probably in the world;" and he describes its size to be "twice as great as that of the New York canal, or the Canal of Languedoc, and two and a half times as great as the artificial part of the Caledonia Canal. The dimensions of the Holland Canal, above-mentioned, are as follows:

Length	51 miles
Greatest width of surface	130 feet
" depth	21 "
Cost	£850,000

The Ganges Canal has sometimes been described as the greatest canal in the world. A writer in *Blackwood's Edinburgh Magazine* for December, 1856, in an article on "Our Indian Empire," says of it: "No single canal in Europe has attained to half the magnitude of this Indian work. It nearly equals the aggregate length of the four greatest canals in France. It greatly exceeds all the first class canals of Holland put together; and it is greater, by one-third, than the greatest navigation canal in the United States of America."

The main line alone has the following dimensions:

Length	525 miles
Greatest width of surface	170 feet
" depth	10 "

These dimensions, however, include river improvements, and do not apply to the artificial channel of the canal.

Including branches, it is about 900 miles long, and irrigates an area of not less than a million and a half of acres. This canal leaves the bed of the Ganges at Hurdwar, at the foot of the Himalayas. It was opened April 8th, 1854. The whole main line of the canal was designed and executed within a period of eight years. Its cost is stated at £1,400,000, or about 7,000,000.

The Imperial Canal of China is 720 miles in length, and its depth is at no time more than from 5 to 6 feet, while in dry weather, it is frequently reduced to 3 feet. It is, in fact, composed of rivers and lakes—making the excavated portion of comparatively limited dimensions.

In the several cases which have been cited, the original dimensions of the Erie Canal have been assumed in any comparison, to wit: Length, 363 miles; width of surface, 40 feet; depth, 4 feet. But the magnificent work which now belongs to the Empire State, has the following dimensions through its entire length:

Length	361½ miles
Width of surface throughout	70 feet
Depth	7 "
Total cost	\$40,000,000

It is believed that the Erie Canal, with its present enlarged prism, may safely challenge a comparison, in point of dimensions alone, with any similar work of ancient or modern times. But if we look to the commerce which is carried on through its channels, showing a tonnage for the last twenty-five years of 61,853,392 tons, valued at \$3,829,588,868, it is speaking very far within bounds, to say that history contains no other records of any such commerce, either in the quantity or value of articles transported.

The following table shows the whole number of miles of canal in the United States, British America, Europe, and Asia, so far as can be ascertained from public records:

United States	5,172
Canada	237½
Europe	12,552
Asia	6,420
Total	24,382½

The first canal built in the United States was the Santee, in South Carolina, in 1802. It connects the Santee and Cooper rivers by a length of 21 miles. The longest is the Wabash and Erie, extending from Toledo, on Lake Erie, to Evansville, on the Ohio river—469 miles. One of the last constructed, and the shortest—that around the Sault St. Marie—three-fourths of a mile long, promises to be one of the most important.

Except upon the New York canals, few or no statistics as to the cost, trade, &c., of most of the canals of the United States have been preserved. An approximate estimate shows the cost of construction to have been about \$25,000 per mile—a total of \$129,326,000—for the United States.

The supremacy of New York over all the other cities of the Union, dates from the completion of the Erie Canal. Up to that time it was the second city of the Union, in point of population, commerce, and extent of trade. Other cities, having more extensive natural means of communication with the interior of the country, not only enjoyed a larger and more important trade, but were increasing, both in population and commerce, with a rapidity which bid fair to leave New York relatively still lower in the scale of dignity and importance. The era of her unparalleled prosperity is coincident with the completion of the canal, by which the commerce of the lakes, and the agricultural products of the great West—just then foreshadowing the magnitude it has since achieved—were brought at once into our magnificent harbor.

The following table, showing the condition of this city at various periods, in respect of commerce, population, and wealth, indicates the agency which the Erie Canal has had in its growth and development:

	1825	1858
No. tons received by canal at tide water	185,405	1,985,142
Value of do.	\$18,540,000	\$61,586,061
Population of N. Y. City and Brooklyn	175,000	1,000,000
Valuation of real and personal property in N. Y. City and Brooklyn	\$106,000,000	\$630,519,208
Value of foreign imports and exports of N. Y. City	\$84,057,000	\$270,983,548*

The mere possession of means of communication is not sufficient to establish an extensive commerce. To win all the advantages desired, it is necessary to be constantly on the alert against rivals who are striving to surpass us in commercial facilities. Our most formidable competitor is Canada, with its great water-line of the St. Lawrence, made navigable from the head of Lake Superior to the Straits of Belle Isle, a distance of more than 2,500 miles, and with vastly greater capacity than is possible to any artificial channel. The St. Lawrence canals pass vessels of 500 tons burden—more than twice as large as the Erie Ca-

* Panic year. The values for the three previous years, were as follows: 1855, \$229,351,169; 1856, \$300,407,314; 1857, \$346,939,774.

nal will admit, even with its enlarged prism. The tolls upon them have been imposed rather with a view to encourage traffic than to raise a revenue. Their success has been most extraordinary. The following statement will show the amount of tonnage which has passed over them for a series of years:

WELLAND CANAL.		ST. LAWRENCE CANALS.	
Year	Tons.	Year	Tons.
1848.....	307,611	1848.....	164,267
1849.....	351,596	1849.....	213,153
1850.....	399,600	1850.....	288,103
1851.....	691,627	1851.....	450,400
1852.....	743,060	1852.....	492,575
1853.....	905,518	1853.....	561,601
1854.....	797,210	1854.....	662,613
1855.....	849,333	1855.....	541,254
1856.....	976,556	1856.....	634,535
1857.....	901,072	1857.....	593,652
1858.....	855,112	1858.....	605,558

The competition of these canals may be regarded as just commenced.

We can successfully combat their influence only by making it more for the interest of every portion of the interior to seek our market, by offering a cheaper rate of carriage, and better prices for its produce.

We have also to contend with an active and vigorous competition from the great lines of communication at the South. The railroads from Baltimore and Philadelphia afford advantages to those cities, by means of their greater proximity to the producing regions west of the Alleghenies, which can only be overcome by increased facilities for transportation on our part. The introduction of steam upon the Erie Canal promises to confer these facilities. A new era in the history of this great work is opened; and the fears, sometimes entertained, that it would cease to be used, are likely to be dispelled.

In view of this prospective revival of the business of the canals, the proposition to re-impose the canal tolls upon the merchandise carried over competing railroads, loses even the specious force with which it has heretofore been urged. Even with a certainty that the canal is ultimately to fall into disuse, such a measure could not be otherwise than impolitic. In any view, it would defeat the very object for which canals were constructed, viz: to cheapen transportation.

If any proof were wanting other than that which is suggested by a statement of the case, it is abundantly furnished by the experience of Ohio, a State which, in public improvements and extent of domestic commerce, may fairly be ranked with New York. This State has 849 miles of canal, built at a cost of more than \$15,000,000, nearly contemporaneously with the canals of this State. A large though decreasing business is still transacted upon them. The receipts from tolls since 1850 have been as follows:

1851.....	\$856,353
1852.....	688,776
1853.....	626,625
1854.....	511,416
1855.....	468,832
1856.....	427,813
1857.....	348,673
1858.....	285,301

The importance of these canals has dwindled to such an extent, that no statement whatever is made of them in the "Second Annual Report of the Commissioner of Statistics," presented to the Legislature of that State, February 1, 1859. Notwithstanding this diminution, unparalleled in the commercial annals of a prosperous and growing State, would not the entire community rebel against any attempt to impose canal tolls upon railroads of that State, with a view to restore to the canals their lost traffic? Is it not manifest that such a proceeding would be suicidal to the entire commercial interest of the State? More wise than to follow the course urged by interested parties elsewhere, Ohio leaves traffic to seek its own medium of conveyance, untrammelled by any legislative test or restriction. Mr. E. D. Mansfield,

the Commissioner of Statistics for that State, in alluding to the diminished revenue, says:

"This is certainly not a very satisfactory picture in regard to revenue; but the canals were not made for revenue merely. They were made for the utility and benefit of commerce; to carry off large amounts of produce, which would otherwise be charged with quadruple cost in reaching market. This purpose they have accomplished; and although the freights on the canals have diminished, yet we see they have transported a very great amount of produce, and we believe they amply repay the interest of the public debt in the benefits to commerce."

Regarded in any just point of view, there is really no rivalry between canals and railroads—especially with canals situated like those of New York.

There are certain articles, the value of which mainly depends upon the rapidity of their transportation—such as live stock, and all the more perishable kinds of food, as well as those possessing great value in proportion to their bulk. The railroad, by the facilities it affords for travel, and the transmission of mails, is instrumental in filling up the interior with people whose industry in turn creates business for the canal. The articles of freight especially belonging to the latter are the various kinds of grain, lumber, salt, iron, cured provisions, etc., etc. Such articles must always constitute a large portion of the traffic on every great route of commerce, and of such the canal will have the monopoly, by virtue of its greater facilities, and cheaper transportation.

Coal Burning on the Boston and Providence Railroad.

Below we give a table showing the amount of coal consumed, and the miles run by fifteen locomotives on the Boston and Providence road for the six months ending May 31st, 1859. The freight and passenger service is kept distinct, and the averages stated in each. The engine 'Washington,' running the largest amount of miles, has used the smallest amount of coal per mile. We print the tabular statement as follows:

Names of Locomotives.	Lbs. of Coal.	Miles run.	Lbs. per mile.	PASSENGER TRAINS.		FREIGHT TRAINS.	
				Lbs. of Coal.	Miles run.	Lbs. of Coal.	Miles run.
New York.....	227,860	8,611	32.3	406,828	12,046	9,380	45.2
Roxbury.....	86,380	828	42.7	1,295	87.7	1,295	87.7
King Phillip.....	282,618	10,980	26.7	1,295	87.7	1,295	87.7
Washington.....	177,970	6,607	26.9	1,295	87.7	1,295	87.7
Taunton.....	102,626	3,213	32	1,295	87.7	1,295	87.7
Rhode Island.....	172,924	5,847	29.6	1,295	87.7	1,295	87.7
Camden.....	166,748	6,398	26.1	1,295	87.7	1,295	87.7
W. R. Lee.....	122,043	3,851	36.4	1,295	87.7	1,295	87.7
Neponset.....	40,569	1,257	32.3	1,295	87.7	1,295	87.7
Providence.....	14,216	364	39	1,295	87.7	1,295	87.7
Bristol.....	60,084	1,743	28.8	1,295	87.7	1,295	87.7
Massachusetts.....	47,800	1,267	37.7	1,295	87.7	1,295	87.7
Iron Horse.....	...	...	...	1,295	87.7	1,295	87.7
Auteborough.....	...	...	...	1,295	87.7	1,295	87.7
Total.....	1,491,018	60,461	29.3	1,106,252	28,534	1,106,252	28,534
Average.....	...	...	...	...	...	...	...

The average coal used per mile for both passenger and freight engines is 32.3 pounds, or about 10 miles per ton. The average cost per mile is 8.57 cents. The coal costs on the tender, all expenses included, \$5.84 per ton of 2,240 pounds. The whole number of pounds of coal used is 2,597,270, or 1,159½ tons, and the aggregate

miles run by both passenger and freight trains, was 78,995. The fuel expenses per mile run on this road have been reduced within a very few years, about 67 per cent. according to the above statement. This shows what can be done by an intelligent adoption of the means to the end.

Michigan Central Railroad.

The annual statement of this company has just been published. The capital account for the year ending May 31st, 1859, is stated as follows:

June 1, 1859, Dr.	
To capital stock.....	\$6,057,840 00
Bond account, viz:—	
6 per cent. sterling bonds, unconvertible, 1st mortgage.....	\$167,488 89
8 per cent. sterling bonds, convertible, 1st mortg.....	500,000 00
8 per cent. bonds, unconvertible.....	258,000 00
8 per cent. bonds, convertible, 1st mortg.....	3,831,000 00
8 per cent. bonds, convertible, 1st mortg., 1st sinking fund.....	3,087,000 00
8 per cent. bonds, convertible, 1st mortg., 2nd sinking fund.....	41,000 00
To income account, balance of this account.....	108,975 97
Unpaid dividends.....	495 00
Total.....	\$14,351,799 86

By construction No. 1, purchase of road.....	\$2,000,000 00
By construction No. 2, expenditures since purchase.....	10,847,238 17
By cash on hand.....	34,478 20
By cash loaned on call.....	34,000 00
Accounts and bills receivable.....	211,579 32
Assets in hands Oliver Macy, General Receiver.....	33,518 63
Assets in hands R. N. Rice, Supt.....	60,508 49
New Albany & Salem Railroad Co., stock and bonds.....	609,763 99
Joliet and Northern Indiana Railroad stock.....	168,225 00
Joliet and Northern Indiana Railroad construction.....	40,768 18
Steamboats.....	311,719 88
Total.....	\$14,351,799 86
The receipts for the year have been.....	\$1,889,777
Operating expenses.....	\$979,552
Taxes.....	93,180
	1,072,732
Net.....	\$317,045

This amount has been disposed of as follows:
Interest and exchange.....\$735,488 07
Paid to sinking fund.....60,000 00
Balance to credit of income.....21,557 00

\$317,045 07

Nothing has been charged to construction during the year; the permanent improvements, as detailed in the Superintendent's report, having been charged into the operating accounts:

The bonded debt of the company, June 1, 1858, was.....\$8,284,063 83
Bills payable of the company were.....118,576 85

Total debt.....\$8,402,639 68

Capital stock.....6,057,840 00

Total.....\$14,460,479 68

The b'nd'd d't is now \$8,184,488 89
Less sinking fund.....64,800 32

Total net debt.....\$8,119,688 57

Capital stock.....6,057,840 00

Total debt reduction during the y'r.....\$282,951 11

The gross earnings of the road, as compared with the previous year, show a decrease of \$590,627 85; divided among the different branches of traffic as follows:

Decrease in passenger earnings	\$382,430 17
Do. freight do.	202,312 86
Do. miscellaneous do.	5,884 82
Total	\$590,627 85

The total amount of expenses of working and repairs for the year has been \$1,071,732 88, being less than last year by \$581,039 48, or 35 per cent.

The comparative monthly statement of earnings is as follows:

	Year ending May 31st, 1858.	1859.	Decrease.
June ..	\$244,373 57	\$170,847 58	\$73,525 99
July ..	211,635 98	143,872 45	67,763 53
August ..	221,353 98	176,060 82	45,293 16
Sept. ..	301,588 74	224,574 50	77,014 24
Oct. ..	262,923 83	209,868 03	53,055 80
Nov. ..	211,860 89	156,298 00	55,562 89
Dec. ..	170,464 77	130,108 71	40,356 06
Jan'y ..	122,379 95	101,886 50	20,493 45
Feb'y ..	107,502 40	102,959 35	4,543 05
March ..	165,936 03	151,864 66	14,071 37
April ..	223,010 87	143,143 30	79,867 07
May ..	185,727 01	127,145 77	58,581 24

Totals \$2,428,757 52 \$1,838,129 67 \$590,627 85

The following table will show some of the leading changes in the earnings and operations of the company during the last two years:

	1857.	1858.	1859.	Percentage of decrease of the last yr to the next previous.
Local passenger earnings	\$602,992 68	\$452,870 51	\$377,978 88	16 1/2 per cent.
Local freight earnings	664,963 83	558,344 14	496,789 16	11 "
Miscellaneous earnings	80,694 47	73,969 64	68,084 82	8 "
Total local earnings	1,348,650 98	1,085,184 29	942,852 86	13 "
Through passenger earnings	1,007,423 07	868,169 05	560,530 51	35 1/2 "
Through freight earnings	748,538 64	475,404 18	384,646 30	29 1/2 "
Total through earnings	1,755,961 71	1,343,573 23	945,176 81	38 1/2 "
Total earnings	3,104,612 69	2,428,757 52	1,888,029 69	24 1/2 "
Operating expenses, exclusive of State tax	2,005,166 55	1,580,290 59	979,552 80	38 "
Earnings, per mile run, passenger	2 02 1/2	1 96 1/2	1 48 1/2	25 "
Do. freight	1 69	1 81	1 62	10 1/2 "
Do. do.	1 85	1 88	1 65	17 1/2 "
Average earnings per mile run	1 19 1/2	1 12 1/2	82 1/2	86 1/2 "
Net earnings per mile run	65 1/2	76 1/2	72 1/2	4 "
Percentage of earnings used in operating, exclusive of taxes	64 1/2 per cent.	59 1/2 per cent.	53 1/2 per cent.	0 "

The president in his report attributes the falling-off of earnings to the following causes:

First. A decrease of business to and from the States beyond our line, the railroads and general business of that region having suffered quite as much as any other part of the country, from the great depression of the times.

Second. The opening of several new avenues to market from the region which had heretofore been drained principally by the two Michigan roads.

Third. The large reduction of freight rates brought about by the competition of the four great seaboard lines, one of which extending to Illinois brought upon all the East and West lines from that State, the evils of that competition and its low rates.

Fourth. The competition for the small business upon the Lakes this year has reduced the rates charged by the lake craft upon freight, between Buffalo and Chicago, to a point below that of any other period.

Some of these causes are temporary and may not occur again for years. The opening of the new lines is a permanent evil, which nothing but the natural increase of the population and business of the new country tributary to all, will outgrow. Should that region upon the return of its usual prosperity develop as rapidly as before, the loss occasioned by the new lines before very long will be overcome.

The local business of the road has been affected by the partial failure of the wheat crop last year. We have received for the transportation of wheat and flour (which is principally local) over \$112,000 less than last year, while our eastward local freight earnings have fallen off \$43,000, which shows the miscellaneous freight to have increased a small amount even in this bad year, and that Michigan as heretofore, is relying less and less upon the uncertainties of the wheat crop.

Our road is in fine order and our rolling stock in excellent condition. The property in every department has been well kept up, and it is probable we were never as well, certainly never better prepared than now, to do a large business with economy.

The cost of operating the road the past year have equalled 53 per cent. of the receipts. For 1858 they equalled 69 per cent.—showing a saving equal to 16 per cent. on the gross earnings. In 1857 the expenses exceeded 60 per cent. of the receipts. The results stated are extraordinary, as we are not accustomed to expect the expenses of carrying on a large business to be reduced in ratio to the reduction in amount of such business. If the road should earn, say, \$1,500,000 for 1858-'59, we have no doubt that the expenses would be reduced to 50 per cent. of the receipts. The reason is obvious. With money flush, our Railroad Companies go it with a high hand. Economy is little heeded. It is only enforced by the pressure of necessity. It would be considered a burning shame if such a road as the Michigan Central could not earn the interest on its debt, representing only about one-half of its cost. This was the stint set before the managers the past year. It was barely accomplished—\$21,557 only, being the excess.

The statement just made places the dividends of the company some distance in the future. If the present ratio of receipts to expenses could be maintained, they need not be despaired of. We think the road has seen the worst of the hard times. Each year should show an increase of receipts of 2 or \$300,000. If one-half of this increase could go to the stockholders, they might begin to expect something in two or three years. To pay 6 per cent. dividends, additional net earnings of only \$370,000 are needed, requiring an increase of say, \$800,000, or a total of \$2,700,000 as gross receipts. The gross earnings for 1858 were \$2,428,787, and for 1857, \$3,104,600, or \$1,214,823 greater than the earnings for the past year. It may take five years to come up to the earnings of

1857, but we think not. Certainly with a fair degree of prosperity, for the interior. The uncertain element in the future is the cost of operating the road. The probabilities are that the current expenses will increase in a much greater ratio than the increase of gross receipts. The greatest degree of economy is obtained only by that patient and conscientious discharge of duty, that constant watchfulness which on our railroads is not the habit or rule, but which are only temporarily enforced by an extraordinary crisis, and are relaxed from as soon as such crisis is past. If a new principle could be introduced into the management of our railroads—if the compensation of the employees could be made to depend upon the value of their services, or the saving they could effect in their several stations, then an extraordinary would become an ordinary economy.

Brunswick and Florida Railroad.

The annual meeting of the stockholders of this company was held at Brunswick, Ga., on the 12th May, 1859, at which the following gentlemen were elected directors for the ensuing year:

H. G. Wheeler, S. C. King, A. S. Atkinson, H. C. King, of Georgia, and D. R. Martin, C. Kibbard and G. E. Gray, of New York. On the organization of the new board, H. G. Wheeler was unanimously re-elected President and Treasurer.

Since the last annual report, the company have directed their efforts mainly to the construction of this road towards the point of its proposed connection with the Atlantic and Gulf (Main Trunk) Railroad; but their progress has been slow, owing to financial difficulties. Since December last, there have been landed at Brunswick 1,000 tons of American rail, 51 pounds to the yard, sufficient to lay about 12 1/2 miles, in addition to the 31 miles then in use. Of this distance, 4 miles had been laid. Beyond the point to which construction was completed to the proposed connection with the Main Trunk line, 67 miles from Brunswick, is mostly graded, and a large part crossed. The entire cost of the road so far has been \$755,000; and to carry on the work, the company held immediate means, amounting, exclusive of conditional stock notes, etc., to \$190,000. These stock notes were given by parties residing on the line of the road, and are made payable when the road is completed to certain points. They amount to upwards of \$50,000 on the main line to the Alabama river, and \$93,000 on the Albany branch.

The mortgage debt of the company remains the same as at the date of their previous report, viz: \$8,500. The floating debt is stated at about \$70,000.

The charter of the Brunswick and Florida Railroad covers a line which is located from Brunswick to near the junction of the Flint and Chatahchee rivers, via Mill Town, Sharp's Store and Thomasville. Also, branches to the Florida line from any point on this route, together with a branch to the Chatahchee river via Albany, &c.

The State chartered the Atlantic and Gulf Railroad (generally known as the Main Trunk) and appropriated \$1,000,000 to aid in its construction. The right of way and franchise of 300 feet on each side of the line of road was granted by the Brunswick and Florida Railroad to the Atlantic and Gulf Railroad, and your Board, before deciding on the further extension of their road, waited until the Atlantic Junction and Gulf Railroad Company should make such a location as appeared to them best for the interest of the country.

It is now ascertained that the route of the Atlantic and Gulf Railroad passes from the Initial Point, or Zero, near the corner of Wayne, Wade and Appling counties, almost on an air-line to a point on the Brunswick and Florida Railroad, 67 miles from Brunswick; thence in a south-westerly course in the direction of Monticello, in Florida, until it reaches within a few miles of the Florida line, and thence to Thomasville and Bainbridge.

This location leaves a vast extent of country lying open for a railroad leading from the Junction of the Atlantic and Gulf Railroad with the Brunswick road, in a north-westerly direction; and as soon as the location of the Atlantic and Gulf Railroad was definitely settled, instructions were given by your Board to the Chief Engineer, to organize a corps and to commence a survey of the line from the Junction to Albany—upon nearly an air-line as was practicable.

As soon as the waters subsided, the party took the field, and the surveys are now being carried on between the Alapaha and Albany.

The Chief Engineer reports, that he made a reconnaissance in a direct line from Albany to the Alapaha river, where he met his party 29 miles from the Junction. The route surveyed, so far on an air-line, is very favorable, presenting no heavier work than that which occurred in the same distance on the road already graded from Satilla Station to Randolph Station, west of Big Creek. The measured distance from Brunswick to the Junction is 67 miles. From the Junction to Albany, the computed distance is 100 miles. *This line of rail will bring Albany within a distance of 167 miles of the seaboard at Brunswick.*

From Albany a direct communication by rail will be made with Montgomery in Alabama. Already a railroad is being constructed from Cuthbert to a point on the Chattahoochee opposite Eufala. Both Cuthbert and Eufala are on an air-line drawn from the junction through Albany. The distance in a direct line from Albany to Cuthbert is 38 miles, from Cuthbert to Eufala 22 miles, and from Eufala to Montgomery (estimated) 75 miles making the distance from Albany to Montgomery 135 miles, and from Montgomery to Brunswick only 302 miles.

The distance by rail from Montgomery to Savannah via the Montgomery and West Point—Opelika—Muscogee—South-western and Central Railroads is 383 miles—making a difference in favor of the direct line from Montgomery to Brunswick, via Eufala, Cuthbert and Albany, of 81 miles.

This saving in distance and time must necessarily bring both up and down freights, from and to Montgomery, over the line of road leading to Brunswick, and it is just as certain that return freights, merchandise, &c., destined to supply those portions of the States of Alabama and Mississippi dependent upon the line of road leading from Montgomery to Vicksburg, must pass over the Brunswick road, via Albany and Montgomery and be distributed at least as far West as Vicksburg.

The construction of this road is under the supervision of Col. Charles L. Schlatter, Chief Engineer.

Debt of Chicago.

The entire amount of the city of Chicago debt to March 1, 1859, was \$2,239,000, all of which has been issued for strictly municipal purposes. The debt is apportioned as follows:

	Funded.	Floating.	Total.
Municipal	\$514,000	\$200,000	\$714,000
Water work	1,025,000	.....	1,025,000
Sewerage	500,000	.....	500,000

Total

The water rents produce annually an amount sufficient to pay operating expenses, the interest on that portion of the debt, and an annual sinking fund for its gradual extinction. The balance of interest is provided for by taxation. The sinking fund of the sewerage loan now amounts to \$30,000, duly invested according to the provisions of the act.

The assessed value of taxables in the city was, in 1855, \$26,992,893; in 1856, \$31,736,084; and in 1858, \$36,200,000, being only one-third of the actual value. The population in 1855 was 83,509, and in 1859 is estimated at 130,000.

Journal of Railroad Law.

ACTIONS FOR DAMAGES.—PLAINTIFF'S NEGLIGENCE.

The case of Mackey vs. the New York Central Railroad Company, drew in question the principles governing the liability of a railroad company to a person injured while crossing their railroad track; a subject on which we have lately mentioned several cases.

This action was brought by the administrators of Abram Mackey under the New York statute, to recover damages for negligently causing the death of Mackey.

Mackey was run over and killed, on the 21st of December, 1854, by the defendants' locomotive and express train of cars, while he was crossing, with his team and sleigh, their railroad, at the highway crossing at the Savannah station, in the county of Wayne. It was claimed in the complaint, that the defendants' agents, on approaching the station, at the time in question, neglected to sound the whistle or ring the bell as required by statute. The proof was that Mackey, who had been engaged for some time previous, in drawing and piling wood at the railroad station at Savannah, was crossing the track northwardly with his team, as the express train was going by that station from the west. The locomotive struck and killed him. Some witnesses did not hear the signals of either bell or whistle, some heard the one and not the other, and some heard both. The defendant's wood house and several piles of wood, stood south of, and within 100 feet of the track, and west of the highway, obstructing the view of a person approaching from the south.

It appeared that as Mackey standing on his empty sleigh, his horses walking approached within 40 feet of the track, he was warned by one Remer, a witness in the case that "the cars were coming." He turned an instant and looked toward the witness without stopping, then suddenly struck his horses, drove upon the track, and as he was crossing, the engine struck him. These facts were not controverted.

A motion for non-suit was denied, the Court leaving it to the jury to say whether this was negligence in Mackey.

The Court charged the jury among other things, that they were to consider the question of negligence on the part of the defendants; that they were guilty of negligence if they omitted to give the signal, either by ringing the bell or blowing the whistle. That they were also guilty in case they did not give such signal, if the jury should find that by reason of the position of the wood and other circumstances, extra care was made necessary for the deceased, in order to avoid injury, which they omitted to employ. That the defendants might by their own acts have made something necessary on their part beyond what the statute required, in order to avoid the imputation of negligence. That another question was: was the deceased guilty of negligence in crossing the railroad? That in passing upon this question, the jury would bear in mind and consider his opportunity to see and know what obstructions, if

any, there were to prevent his views, which had been created by the railroad company and his acquaintance with the premises and time of the passing of the trains. That if the deceased was negligent, although the defendants were also negligent the plaintiffs were not entitled to recover. That if the deceased's negligence contributed in measure with the negligence of the defendants, to cause the injury, the plaintiffs were not entitled to recover notwithstanding the negligence of the defendants. That the situation of the wood, could only be regarded in considering the obligation of the defendants to provide greater care against accidents.

To this charge of the Court the defendants excepted. The jury rendered a verdict for the plaintiffs for \$3,000 damages.

The defendants moved for a new trial, which was denied. They then appealed; and the following is the substance of the opinion of the appellate court upon their appeal.

E. DARWIN SMITH, J., after disposing of a preliminary question in the case. It was proved by one witness who was standing two rods south of the track and on the west side of the road or highway, at the crossing, at the time of the accident, that the plaintiff's intestate came out of the field into the road where the witness was standing, and was going towards the crossing when the witness spoke to him and told him the cars were coming; he (the deceased) was then going slowly, standing on his sleigh and his horses on a walk. "As I spoke to him" (the witness said) "he turned his head towards me, and then struck his horses with the lines and went on to the track." The witness, on cross-examination, further said that he was about six feet from the deceased when he spoke to him; was not able to say whether he (deceased) heard him or not. "He turned and looked towards me when I spoke to him, and then with quick motion struck his horses with the lines." This witness is not contradicted or in any way impeached. His testimony is clear and explicit, and is fully entitled to credit, for aught that appears in the case. I think upon this positive testimony, unexplained, uncontradicted, or in any way weakened, the justice at the trial would have been warranted in non-suiting the plaintiffs; and how the jury could say that the plaintiff's intestate was not guilty of negligence, or that his negligence in no way contributed to his death, I cannot comprehend. If the rule that a plaintiff suing for negligence must himself be free from fault is a sound one—if a plaintiff whose negligence has contributed to the injury is not entitled to recover against a party no more guilty of negligence than himself, and this rule of law is to be maintained, I cannot see how such a finding of a jury can be sustained. It is directly against the evidence, and we cannot uphold it or refuse to set it aside, unless we adopt the rule which is, I fear, quite prevalent in the jury box, that the same measure of justice is not to be meted out to a railroad corporation that is meted out to natural persons.

There are several exceptions to the charge, but they all relate to the wood pile of the defendants so placed as to obstruct the view of the plaintiff's intestate when coming on to their track from the south side of the road. The judge told the jury that the situation of the wood could only be re-

garded in considering the obligation of the defendants to provide with greater care against accidents. Wood was piled all along, for many rods from the crossing, on the sides of the railroad track westward, so as to obstruct the view of a person at the crossing. In what respect this imposed any extra duty upon the defendants in running their cars, I cannot perceive. The case contains no suggestions of any particular neglect of any duty in respect to the wood pile. The plaintiff was not a stranger there. He was at work drawing and piling wood at that station, and had been so engaged the whole of last season. (The accident was on the 21st of December 1854.) It was in proof that 24 trains of cars passed there daily, which must have been well known to the deceased, as well as to their relative times, and the customary practice in passing that station. It seems to me that it was the height of impudence and heedlessness for a man, with such knowledge, to approach and attempt to cross a railroad track about the time a train was due, till he had fully ascertained that it was entirely safe to do so, and that the fact of the location of this wood pile, perfectly well known to him, does not diminish his duty to be careful in the slightest degree. The rather, in my opinion, did it increase his duty to greater carefulness. I cannot agree with the implication of the charge, that because there was a wood pile in the way of his seeing far along the track—a wood pile placed there by the defendants probably through the personal agency of the plaintiff's intestate himself—he was, therefore, excused or relieved from exercising due care and diligence. I hold that he was bound to exercise care and diligence and foresight in proportion to the danger to be avoided, and the fatal consequences involved in his neglect. His vigilance should be quickened, not slackened, by the fact that he could not see the track sidewise to any distance, till he got right on it. He was bound to act as a prudent rational man in view of the surrounding circumstances; and no prudent man would drive heedlessly upon a railroad and attempt to cross its track, till he had actually and fully ascertained that the track was clear, and that there was no danger. The allusion which the circuit judge made to the wood pile, in his charge, I think clearly erroneous. He made it an excuse for the plaintiff's intestate in driving heedlessly upon the track. It must have been so construed by the jury. I think all the exceptions to the charge, so far as they relate to the situation of the wood pile, and its influence on the relative rights and duties of the defendants and the plaintiff's intestate, well taken, and that there should be a new trial.

Minneapolis and Cedar Valley Railroad.

At the annual meeting of the Minneapolis and Cedar Valley Railroad Company, held at Northfield, recently, John W. North, Esq., President of the road, resigned; and Gen. James Shields, of Rice county, was elected in his stead. Mr. North retains his position in the Board of Directors. It is understood that the election of Gen. Shields indicates that the policy of the company will be materially changed from that hitherto pursued; and in the programme of future management, we believe, it is intended to take prompt measures to bring what is known as "Railroad Currency" up to par, at least so far as this company can hasten the event.—*St. Paul Pioneer.*

Illinois River Railroad.

This road is to extend from Pekin, Tazewell county, to Jacksonville, Morgan county, a distance of seventy-three miles. It passes through the counties of Tazewell, Mason, Cass and Morgan, which are well known to be unexcelled as an agricultural district. It will connect, two miles west of Pekin, with the Peoria and Hannibal road now in process of construction, and thence to Chicago via the Bureau Valley and the Chicago and Rock Island roads.

All the iron necessary for this road was purchased some time since in England, and 6,500 tons of it have been shipped to New York. By the 1st of July 5,000 tons will have been shipped from New York to Chicago. Six cargoes of rails, chairs and spikes, making over 2,000 tons, have already arrived here, and several other cargoes are daily expected. Over 500 tons of rails and a portion of chairs and spikes have gone forward to the line of the road, and shipments will be continued rapidly. Arrangements have been made for sending forward in a few days two locomotives and the necessary cars for track-laying from two points, which will be commenced early next month and prosecuted vigorously to completion. The road-bed between Pekin and Virginia, Cass county, fifty-eight miles, is completed with the exception of about three miles of light work which will be finished by the time the track-layers reach it.

It is aimed to have the road completed to Virginia by the 1st of October next, and to Jacksonville by the 1st of January, 1860. This will be early enough to reap the benefit of carrying this season's crops to market. These, especially wheat and corn, along the line of the road, promise a full average yield, and they will mostly find their market at Chicago. Cass county alone, though containing less than 400 square miles, annually exports 30,000 hogs, several thousand head of fat cattle, besides a large amount of grain. Morgan county exports annually about 75,000 hogs, from 16,000 to 18,000 fat cattle, and a large amount of grain. Mason and Tazewell counties export largely of all these products—especially of wheat and corn. We congratulate the business men of Chicago, upon the favorable prospects of the speedy opening of a line of road from which they will derive a large and profitable trade. The energy and enterprise of those who have pushed it forward in the face of the monetary revulsion are worthy of all praise.—*Chicago Tribune.*

Philadelphia City Railroads.

There are ten different horse railroads for carrying passengers now in operation in Philadelphia, covering a distance of probably one hundred miles of single track. The number of cars is over 300, and the number of horses must be a couple of thousand. The men employed by them, in all capacities, amount to about one thousand. The Fourth of July was a great day on these roads. The amount of money received on all of them, on that day, was \$8,787. This represents a total of 175,740 passengers at full five cents fare. The operations of each road are shown by the following statement, which we have obtained from official sources:

Roads.	Cars.	Receipts.	Fares at 5 cents.
Second and Third...	57	\$1,564	31,280
Fifth and Sixth....	50	1,340	26,800
Fourth and Eighth..	38	1,050	21,000
Tenth and Eleventh..	37	1,015	20,300
Race and Vine.....	26	780	15,600
Arch Street.....	16	370	7,400
Ridge Avenue.....	10	290	5,800
Girard College.....	19	594	11,880
Market Street.....	35	1,000	20,000
Spruce and Pine....	16	459	9,180
Darby Road.....	9	325	6,600
Total.....	313	\$8,787	175,740

These figures are surprising, but they do not tell all. For many persons got exchange tickets at six or eight cents, which carried them over two roads, and besides there are a good many persons

on the free list. So that it is estimated that the actual number of individual trips made was not less than two hundred thousand. This represents nearly one-third of the population of the city of Philadelphia, men, women, and children, the old and disabled, the invalids, and the children in arms. With such a result on a single day, who will say that city railroads are not a great public blessing? In the days when omnibuses were the only public vehicles for traveling at a cheap rate in the city, the number of passengers on a great holiday could scarcely have amounted to one-sixth of the travel by the city railway cars on the 4th.—*Philadelphia Journal.*

Hannibal and St. Joseph Railroad Lands.

It is generally known that Governor Stewart recently accepted a portion of the Hannibal and St. Joseph Railroad, thereby permitting the company to put in market a large amount of very valuable lands. This act seems to have given general satisfaction to the citizens along the line of the road.

The law requiring the road to pass inspection as a first class road before the lands should be certified to the company by the Governor, was undoubtedly intended to secure the State on her bonds loaned the company, and not to permit the company to sell their lands until the road would, of itself, be ample security to the States. Whether or not the road is, in every particular, a first class road, the object originally contemplated in the law has undoubtedly been attained. The road is paying well, and trains are constantly making their regular trips. On certain portions of the road where temporary structures were first erected, in order that trains might run over the road sooner than they otherwise could have done, permanent and substantial works are being supplied, and in a short time, if the present plan is continued, the Hannibal and St. Joseph Railroad, in its whole length, will compare favorably with other so-called first class roads.

The sale and improvement of so large an amount of valuable agricultural lands, will certainly result to the immediate and permanent benefit of the State, for the taxes arising from them will soon be an addition to the receipts of the Treasury of no small importance. Why then should they have been permitted to lay idle for one, two, or three years longer? We certainly cannot see any good that would have resulted from such a policy. We do not believe the company will ever forfeit the road to the State, but will continue to pay their interest, upon bonds, as they fall due.—*Jefferson City Examiner.*

The Welland Railroad.

We have the satisfaction of announcing that the capacity, and facilities, for the transportation of grain by the Welland Railway, have been successfully developed in such a manner as fully to carry out the opinions expressed by its promoters in their original prospectus.

Although, on account of inadequate notice, sufficient preparation had not been made for the experiment, and the machinery was not put in motion, until near 1 o'clock, the cargo of the schooner *Farnham* (12,750 bushels) was by 7 o'clock transferred to a train of 27 cars at Port Colborne, which, before 8 o'clock, was in motion down the line.

The weight of this train—something over 350 tons—was easily drawn by one locomotive; and, in the opinion of the Superintendent, the capacity of a first-class engine would equal 14,000 bushels of corn, or 382 tons a load. This fact shows the advantage possessed by the Welland Railway for carrying heavy trains at a small expense; and that, when the machinery is in good working order, a cargo can be transferred from the hold of a vessel on Lake Erie to the hold of a vessel on Lake Ontario within twelve hours.

The facilities of this line will, we feel assured, greatly increase the amount of trade in the direction of Lake Ontario, and regain what has been lost by the Canada route through the competition of the New York railways.—*St. Catherine's Journal.*

For the week ending July 11, 1859.

Railroad Earnings.

Decrease \$45,721 71
The decrease was wholly in freight.

Increase.....	\$31,187 97
---------------	-------------

June, 1898	47,166 48
TO ()	11,192 10
Increase	\$11,192 10

Pacific Railroad of Texas.

Intelligence has been received here that the important suit between Texas and the Pacific Railroad Company has been decided by the Supreme Court of Texas, and that the decision is adverse to the company. Such a result has not been expected here, and it will create a bitter disappointment in many quarters.

We can explain, in a few words, the progress of the controversy to this point. The State of Texas, through her Governor, instituted suit some time ago against the Pacific Railroad Company to obtain a forfeiture of their charter for non-compliance with its conditions. The suit was brought before a lower court of Texas, when it was dismissed without a trial, on the ground that there was no cause for bringing it.

The jury determined that the grounds of forfeiture of the charter set forth in the petition were all either insufficient, or insufficiently alleged, except one, which was, that the President, or Vice President, and a majority of the Directors, did not reside in the State of Texas at any time after the 19th of June, 1858. They held that the law requiring that was constitutional, and that it did not impair any right conferred upon the company by the charter. Thereupon the Governor appealed to the Supreme Court of the State for a decision as to whether there was not ground for trial in the lower court. The recent decision of the Supreme Court is, that there is cause of action, and, of course, the case must now go to trial in the lower court.

We presume that the company will go before the next Texas Legislature, if necessary, for relief from any disability to which they may have subjected themselves by dilatoriness, or informality of action. Of course, there must, at the best, be considerable delay, so that the progress of the great enterprise is utterly arrested for a time, at least.—*Louisville Journal.*

American Railroad Journal.

Saturday, July 16, 1859.

Copper Smelting at Baltimore.

For several years Baltimore has been largely engaged in the business of smelting and refining copper and contains two of the most extensive establishments for this purpose in the Union. One of these is owned by the "Baltimore and Copper Smelting Company" whose works are located at Canton and have been successfully managed by Dr. David Keener, one of our most accomplished metallurgists; and the other belongs to the "Baltimore and Cuba Smelting and Mining Company" located at Locust Point, and of which Haslet McKim, Esq., is the energetic and worthy president. The operations of these companies cover an immense interest, and together during the financial year ending 31st November, 1858, purchased and smelted the following amount of ores:

South American,	9,451 tons,	valued at	\$1,180,000
Cuban.....	1,832 do.	do.	153,550
Domestic.....	3,797 do.	do.	350,000
Total....	15,080 do.	do.	\$1,683,550

Of the domestic ores received at these works, 1,250 tons were from Polk county, Tenn.; 908 tons from Maryland (a large portion being from the Springfield mine) and Pennsylvania; 130 tons from Virginia; 540 tons from the Lake Huron region, and the remainder from the Lake Superior mines and other locations. The quantity of ingot copper produced at the two Works was about 8,000,000 pounds valued at \$2,000,000. The value of foreign copper received at Baltimore in 1857-8 was \$602,614, of which sheathing copper \$3,189,

copper in bars or pigs \$18,961, old copper \$100,232 and copper ore \$384,232. The value of the foreign material re-exported was \$185,436. The weight of these is not stated (as it ought to be) in the Treasury Report.

New York and Erie Railroad.

3 Threadneedle Street, E. C. }
LONDON, June 24, 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR: Your article of 4th June, embodying an anonymous proposal to take a ten years' lease of the Erie Road, has excited much interest in England. You invite responses to the proposal. Probably before you can receive this, the offer to lease may have been either dealt with, or dropped; but there may be good, and can be no harm, in giving you our opinion that a lease on the terms you mention, or on the more detailed terms stated in the *Tribune* of the 8th of June, would be favorably regarded by mortgagees, bondholders, and stockholders, in this country, provided the parties offering themselves as lessees be acceptable, and the knotty points can be solved which must arise in stipulating for sufficient guarantees that the line and rolling stock be fairly maintained, and that there shall be "honor bright" in sustaining the connexions, and capabilities, of the route.

There has been every disposition here to sustain Mr. Moran, and to favorably construe his actions and administration; but he has managed to sail so fearfully near the wind with the payment of his interest on 1st and 3d mortgage bonds, that everybody is afraid he will have the ship on the rocks. Europeans are at a loss to understand the policy which allows the world to doubt whether the 1st mortgage interest of \$210,000 a year will be met out of revenues amounting to nearly that amount fortnightly. Only \$76,000 per month are wanted to pay interest on the three first mortgages; surely nothing in the whole administration of the company's affairs is more important than the punctual payment of the coupons on these bonds. If forbearance be required on the subordinate securities, it may much more safely be counted on, and if the value and reliability of the 1st, 2d, and 3d, had been maintained, there would have been a sort of anchor of confidence to hold on by—an element of stability in one set of securities, which the return of good times would have extended to the others; but now all confidence is shaken from the highest to the lowest, and the panic-struck holders in America have been selling their first mortgage bonds as tainted property, although the whole amount of them is far less than one year's gross income.

No doubt the road required extensive improvement; we cannot judge whether any material part of the improvements effected might have been postponed; if not, then Mr. Moran may plead that necessity has no choice, but it certainly does lie on him to prove that he could not have avoided the course which has so shaken the confidence of every class whose interests have been committed to his care; and we shall sincerely rejoice if he will place his defence before his constituents (particularly the inferior bondholders on this side of the Atlantic), and succeed in re-establishing their confidence.

If, however, a lease of this road is to be the order of events, would it not be well for the New York Central, alone, or jointly with the Pennsylvania

Central, to become, in substance if not in name, the lessees; not for ten years, but in *permanence*, and so, let one of the elements of these periodical fits of pugnacity be finally withdrawn.

Yours respectfully,

HESELTINE & POWELL.

On this side, we are as much in the dark as to the present condition of the Erie railroad, or rather of the causes that have produced its present apparent condition, as are the stock and bondholders abroad. We know that the company are in default upon *all* its bonds, but whether from inability to pay the interest on them, or whether the company have otherwise appropriated such net earnings as have been realized, the public have no information. In 1858, the acknowledged net earnings were sufficient to pay the interest on about \$17,000,000. We think it very probable, though we have no means of knowing, that the next annual report of the company will show net earnings equal to the interest on the 1st, 2nd and 3rd mortgages, which call for about \$900,000 annually. Whatever they may be, we presume they have been used in liquidation of the *floating* debt of the company. We can offer no other solution. Mr. Moran does not choose to ventilate his mode of doing things before the public. We will not impute to him any unworthy motive; we believe him incapable of conspiring to sacrifice the road to any of the mortgage bondholders, but certainly he could not have taken any course so effectually to produce such a result as the one he has steadily pursued.

With regard to the proposed *lease* of the road—we take it that no one will dispute the premise, that a party of competent railroad managers *could* run this road cheaper by at least 20 per cent., than it has been, or can be managed by the company. They would make it for the interest of every person employed to do his best, instead of doing nothing, or doing his worst, oftentimes. We appeal to every man of sense, to say whether it is not reasonable to suppose that were the road owned by individuals, *one fifth* more might be made out of it than is at present made? and whether every commercial and manufacturing enterprise conducted as the Erie railroad is would not fail? Twenty per cent. of the earning of the past year saved, would have produced \$2,200,000, equalling the interest on \$31,000,000. English railroads earn a trifle over 7 per cent., *gross*, upon their cost. Yet they contrive to place something over one-half of this amount on the side of *net* earnings. The Erie railroad, for 1858, earned something over 18 per cent. on its funded debt. Nothing but incompetency could prevent *seven* per cent. of this amount from going to the bondholders.

Again. A competent party, taking hold of this road would increase its receipts a half a million a year over the *do-nothing* policy of Mr. Moran, in reference to securing business. We have traveled a good deal within a few months past, and we have to see the *first* handbill or advertisement of the Erie at the stations of, or on the lines of other roads. We have made it a point to have our eyes about us for the special purpose of seeing what the Erie was doing to keep its road before the public. A person can hardly go into a station in the most remote parts of the country *without* see-

ing flaming advertisements of the other leading companies, the Pennsylvania in particular, with minute directions to the travelers passing over their lines, setting for its advantages and attractions. In this mode of advertising, the Pennsylvania Company take the lead.

Gentlemen who have traveled all over the Western States tell a similar story. If one road advertises itself throughly, a rival line must do the same, or lose its business. If all unite in such a course, they stimulate, create travel, to an amount exceeding ten times the cost of doing so. The Erie Company has driven away every passenger, and every pound of freight, that can be driven away from its road. It is now, luckily, at low water mark. Those now managing the road can never turn the tide in their favor. They are completely played out, particularly at the West, the great source of business for the road. Before, the former prosperity of the road can be regained, a considerable portion of its future business must be created.

The great obstacle to leasing the road will come from the directors. We can hear of opposition from no other source. Such opposition is to be expected. The course proposed is the alternative to the threatened ruin they have brought upon the road. They cannot be supposed to be eager to acknowledge themselves incompetent for their duties. It is very likely that many of them have complications of one kind or another with the road. Then there is a *Long Dock*. There is probably a good sized *cat* under this heap of meal. Whatever may be the case, one thing is clear—the party in power have either ruined the road, or have brought it to the very brink of ruin. Mr. Moran may have the financial talents of an *Archangel*, but has made a very poor show of them on the Erie Railroad. If we are correctly informed, the company is in fault upon every issue of bonds. It has not a single dry spot to stand upon—not a single point it can urge in its favor. The only good feature in the case is that *financiers* are no longer wanted. Their functions are at an end. The credit of the company is no longer to be sustained. It is gone. What is now wanted are parties who will make the most money out of the road for its owners. Notwithstanding the giving out from certain interested quarters, we assure the bondholders that a party stand ready to take a lease of the road on favorable terms to the former, possessing as much means, as much respectability, and fifty times the practical talent possessed by the present board of directors, for the proper management of the road.

Niagara and Detroit Rivers Railroad.

We learn from the *Detroit Free Press*, that the contract for building this road has been awarded to James Morton, of Kingston, the original contractor under the old McBeth Board. Mr. Morton is a gentleman of great practical ability in railroad matters, and of ample means to construct the entire line.

Dayton and Michigan Railroad.

We learn that track-laying on the Toledo division of this road, is progressing so rapidly that the line will be opened by the first of September from Dayton to Toledo. At the same time good progress is being made, at several points north of Lima, ditching the road and ballasting the track with gravel.

Eastern Railroad.

We have received the 24th annual report of the Directors of this company, for the fiscal year ending May 31, 1859, from which we learn that the receipts from earnings of the road during that time were:

From passengers.....	\$493,092 54
" freight.....	130,553 63
" parcel, post and cars.....	12,958 29
" mails.....	9,624 00
" property and territorial accounts, rents, etc.....	16,906 83
	\$663,135 29

And the expenditures were:

Maintenance of way.....	\$77,869 32
Locomotive power.....	47,146 77
Train expenses.....	66,003 02
Station.....	44,900 07
Fuel.....	60,634 90
Office establishment.....	22,592 55
Miscellaneous.....	3,748 41
Rent of Gr'd J'n Road.....	11,000 00
Insurance and taxes....	9,714 91—
	343,609 95

Net earnings.....	\$319,525 95
Less interest paid and accrued.....	124,150 21

Net income.....	\$195,375 13
The net earnings of the previous year, interest off, were.....	138,041 92

Showing a gain, the past year, of. \$53,333 21

The road-bed, superstructure, and equipment, have been kept in good condition. The company have expended during the year \$40,304 32, in repairing and re-building bridges—making no less a sum than \$106,303 expended for this purpose within the past four years. The floating debt has been reduced during the year, \$100,735 14; and the funded debt, \$75,000—making the total reduction of indebtedness for the year, \$175,735 12.

Against the floating debt, amounting to \$99,301 14, the company have cash, \$9,193 06, and notes receivable, mostly secured by mortgage, amounting to \$41,456 38—thus leaving \$48,651 70. The wood and materials on hand, and paid for, amount to more than that sum. The bonds due in 1862, amount to \$700,000; and those due in 1874 to \$445,500. These, and all other liabilities, except the income bonds, floating debt, and interest, are to be considered and treated, not as an annual charge upon the earnings of the road, but as so much invested as permanent capital, to be funded anew at maturity, and ultimately converted into capital stock, inasmuch as stock has never been issued to the amount of the cost of the road. There remains, then, to be provided for from the annual earnings, aided by sales of property as opportunity offers, the balance of the floating debt, the interest on the funded debt, and \$75,000 a year for income bonds. Should the business of the road the present year be as prosperous as that of the past, the net receipts will extinguish the floating debt, and provide for the income bonds; and should sales of lands be effected, the proceeds of such sales, by relieving the net income to that amount, will leave it applicable to the payment of dividends.

The South Reading Branch, as usual, has been operated at a loss—the deficiency being \$874 75. The earnings of the Essex Road were \$59,991 89, and the expenses, \$45,685 10—leaving \$14,306 79—sufficient to pay the interest on their bonds (except those held by the Eastern Company), and \$305 12 besides. The earnings of the Portland,

Saco and Portsmouth Railroad were \$208,299 41, and the expenses \$104,270 25, leaving \$104,029 16—sufficient to pay its stated dividend of 6 per cent., and leaving \$14,029 16 as surplus. As this must be retained by that corporation for its own uses, the Eastern Company receive no income from that source for the year.

GENERAL STATEMENT.

Capital stock.....	\$2,853,400 00
State of Massachusetts.....	500,000 00
Bonds.....	1,605,500 00
Notes payable.....	76,651 22
Borrowed money.....	22,649 92
Due other roads.....	26,046 15
Coupons for interest unpaid.....	6,117 00
Dividends unpaid.....	6,588 96
Essex Railroad interest.....	127 00
Grand Junction Railroad coupons.....	2,400 00
Suspense account.....	4,730 55
Contingencies.....	4,021 47
Interest.....	18,871 59
Profit and loss.....	2,115 53
	\$5,128,719 39

Cost of Main line, 44.2 miles.....	\$3,124,848 65
" M'bleh'd Br. 3.0 ".....	55,843 06
" Glouce'r " 13.1 ".....	338,879 71
" Salisbury " 3.8 ".....	79,189 38
" Saugus " 8.4 ".....	236,246 82
" S. R'd'g " 8.1 ".....	299,468 36
	80.6
	\$4,134,475 97

Essex Railroad.....	262,102 34
Equipment.....	456,523 86
Real estate.....	85,049 02
Stocks and bonds.....	35,536 00
Notes receivable.....	41,456 38
Due from agents.....	53,123 19
Materials on hand.....	49,259 57
Cash.....	9,193 06
	\$5,128,719 39

Fayette County (Pa.) Railroad.

This railroad when completed will extend from Uniontown to McConnellsville, and at the latter place connected with the Pittsburg and Connellsville Railroad. Its length is about 12½ miles, but in this is included about 9-10ths of a mile which will ultimately be taken by the P. & C. R. R. Company. It was probably opened to Mount Braddock, a distance from Uniontown of 8 miles, on the 4th inst. Of the whole line 65½ per cent. is straight, and 34½ per cent. curved. The whole amount of curvature is 770°, and the entire distance from Uniontown is 19 per cent. longer than a straight line. In this respect, as well as in some others, the road will compare favorably with other lines through uneven countries. The highest grade is 95 feet to the mile, and the whole amount of ascent going East is 249¾ feet, and of descent 323¾ feet, the difference being 74 feet, by which amount the bridge on the Youghiogony river is lower than the grade at Uniontown. The cost with rail 48 pounds to the yard, is estimated at \$6,113,371, and may cost \$125,000. Though a comparatively short road, this is an important one to Uniontown, which through the P. & C. R. R., and the Pennsylvania Railroad, will be secured a direct communication with Pittsburg, and the whole East and West. Uniontown is situated on what was formerly the greatest of national highways, the National or Cumberland Road. Since the opening of the great railroads of the country, however, this previously most important thoroughfare has become comparatively insignificant, and Union-

town, which then possessed advantages second to none in the way of communication Eastward and Westward, has since been entirely shut out from the commercial world. The present enterprise is an attempt to resuscitate its fortunes, and again place Uniontown, and the rich agricultural and mineral region around it, in easy communication with the best markets. The officers of the company for the year 1859 are—Hon. Nath. Ewing, President; John N. Lewis, Chief Engineer; and S. D. Oliphant, Secretary and Treasurer. Office, Uniontown, Pa.

Macon and Western Railroad.

The condition of the financial affairs of this company, June 1, 1859, is shown in the following general statement:—

Construction accounts, etc.	\$1,500,000 00
Expenditures	88,684 18
Dividend No. 25	57,552 00
Interest on Bonds	3,189 50
Winn Case	9,322 89
Treasurer's Balance	\$33,686 74
Bills receivable	47,881 07
Freight agents	7,163 55
Bank of the Republic	3,440 52
Central R. R., J. J. Soutler	40,000 00
Bank of Charleston	6,020 01
Post Office Department	2,993 04
Geo. Parsons & Co.	83 15
American Atlantic Screw Steamship Co.	5,073 72
G. B. Lamar Loan	10,000 00
	156,845 80

Total	\$1,815,094 37
Capital stock	\$1,438,800 00
Bonds	65,500 00
Profit and loss	107,917 05
Freight earnings	\$115,014 67
Passenger earnings	61,077 04
Mail earnings	5,086 90

Interest	564 62
Negro Hire	4,638 52
Central Railroad and Banking Co.	564 62
Sale of freight cars	15,707 98
W. and A. Railroad	175 10

Total \$1,815,094 37

The road has practically no floating or funded debt, the uncalled-for instalment on the stock being sufficient to pay the entire amount of outstanding bonds when matured.

Mobile and Girard Railroad.

The Columbus papers contain the proceedings of the late annual meeting of the stockholders of this road, at Girard, Maj. Jno. H. Howard, was re-elected President.

The following gentlemen were chosen Directors for the ensuing year: Homer Blackmon, John Goldsmith, Wm. H. Mitchell, T. P. Threewits, D. B. Thompson, Thos. H. Dawson.

GROSS RECEIPTS OF ROAD.	
Rec'd from passengers	\$31,922 01
" " freight	44,851 51—\$76,773 53

EXPENSE OF ROAD.	
Transportation	\$35,711 37
Repairs of road	20,055 50—\$55,766 77
Receipts of road	\$76,773 52
Expenses	55,766 77

Net earnings of road	
Assets of road	\$21,006 75
24 city bonds at 90c.	36,659 48
Mail contract	21,600 00
	4,500 00—\$62,769 48

LIABILITIES OF ROAD.	
Bills payable	\$26,183 04
" passed by Supt.	20,900 00—\$47,183 04

\$15,586 44

Interest and Dividends.

The King's Mountain Railroad Company have declared a dividend of three and a-half per cent., payable at Yorkville, S. C.

A 5 per cent. dividend has been declared by the Cleveland, Columbus and Cincinnati Railroad Company, payable Aug. 1, at the office of the United States Trust Company, in this city.

The Waltham and Watertown (Horse) Railroad, a dividend of 4 per cent., payable July 11th.

The Macon and Western Railroad Co. have declared a dividend of 7 per cent., payable August 1.

Railroads in Texas.

Texas is fast becoming a great and prosperous State.—Within a brief period, her people have turned their attention to railroad building, and the progress they have made attests their zeal and energy. There are at present in active operation in Texas 228 miles of railroad—57 of which were constructed during the past six months. In addition to this, 124 miles have been graded within that period, and 164 put under contract, while the amount of iron purchased and arrived, or arriving, for future work, is in the aggregate about 23,000 tons. Something like 1,000 or 1,200 hands are constantly employed upon the various sections under contract, and it is expected that 80 or 100 miles more of road will be put in working order in the State during the year. This for Texas, laboring under the disadvantages of partial isolation, and a not very numerous population, scattered over a large amount of territory, must be looked upon as a very fair effort, giving promise, if it holds out, of pushing that State in due time into the front rank of enterprise, prosperity and greatness.

Ohio and Mississippi Railroad.

Annexed is the official statement of the business of this road for the past half-year:

Gross earnings for 6 months, ending June 30, 1859	\$486,796 38
Expenses for same time, including taxes	246,425 26

Net for 6 months	\$240,371 12
5 per cent. dividend declared July 6, 1859	237,805 00

Surplus	\$3,066 13
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Military Value of Railroads.

The German papers express their astonishment at the omission of the Austrians to tear up the railroad track, and so destroy a military means which the French have so utilized. The Vienna Press, improving the topic, points out the fact that the French soldiers brought out from the reserve at Montebello, approached so near the scene of action in the trains that they commenced firing from the car windows before they were disembarked.

Louisville and Nashville Railroad.

We learn from the Chief Engineer of this road that it will be ready at this end, by the middle of August, for cars to run as far as Bowlinggreen. The other end is now traversed by the cars, we believe, from Louisville to a point within 30 miles of Bowlinggreen. This gap will, of course, be greatly shortened by the 15th of August. The Engineer is confident the cars will run through from Nashville to Louisville by the middle of November. Considering the nature of the ground through which the road runs, in connection with the fact that several difficult tunnels, and not less than five very expensive bridges, including one or two of unusual length, have been included in its construction, the present managers of the work have made good time, notwithstanding the diffi-

culties they have had to encounter in relation to county bonds.—Nashville Gazette.

Rock Island Railroad.

The statement of this company for the fiscal year which closed June 30th, has not yet been served up. Reason—not sufficiently cooked.

Buffalo and State Line Railroad.

The election of officers of the Buffalo and State Line Railroad Company resulted as follows: President, George Palmer; Vice President, Dean Richmond, James S. Wadsworth, Joseph Field, Charles H. Lee, William Keep, Harrison White, John Wilkeson, H. F. Lansing, Alanson Robinson, George W. Patterson, Charles Moran, Daniel Drew.

Texas Railroads.

We learn from the Houston Telegraph that the Central road is completed sixty-five miles from Houston, and that thirty miles of the Brazoria road are completed and in running order. The company is at work laying down the balance of the iron, all of which, to complete the road to Columbia, has arrived. There are now over 200 miles of railroad in Texas completed, connecting with the city of Houston.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets. OASWELL & PERKINS, Brokers, 69 Wall st.

New York, July 9, 1859.

Car Wheel Boring Machine FOR \$400.

ONE of Wheeler's best vertical Machines, with over-head pulleys and shafts, cost \$700. Has been used a short time and is in perfect order, ready for use.

WILLIAMS & PAGE, 44 Water st., Boston.

FREIGHT CARS for SALE.

11 CARS—Have been run about one year,—viz:—
2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash. WILLIAMS & PAGE, 44 Water st., Boston.

FOR SALE.

2 FIRST CLASS LOCOMOTIVES, warranted to be superior in every respect. Weight 21 tons. Gauge 4 feet 8½ inches. Cylinder 15x21 inches. Outside connection. Biler 44 inches diameter. 130 Copper Flues, each 10 feet 6 inches long, 2 inches diameter. 800 sq. feet Fire-Surface. Tender, 1,700 gallons. 5 feet Drivers. Are entirely new, never having been used. For terms apply to

GEO. T. M. DAVIS, 47 Exchange Place.

New York, June 22, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about

250 Tons English Rails same size and weight. M. K. JESUP & COMPANY, 44 Exchange Place.

New York, June, 1859.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER, BALTIMORE, And 17 Nassau st., New York.

NOTICE to RAILROAD CONTRACTORS.

OFFICE OF THE RICHMOND AND YORK RIVER R. R., Richmond, June 25, 1859. THE undersigned is authorized to receive Proposals for the unfinished Grading, Bridging, Delivery of Gravel, Laying the Track, Depots, and all other work necessary to complete the 2nd Division of the Richmond and York River Railroad to West Point (15.5 miles) including Pamunkey River Bridge, Wharfing at Pamunkey River and at West Point.

Proposals sealed, will be received at this office in Rock-Hill in this city, until the 20th day of July, next, at 12 M., where Plans, Specifications and all information necessary for bidding, will be furnished on and after the 10th of July.

Two separate bids to be made by each bidder:—One to state the price in cash for each item; the other to state the price in 5 per cent. 1st Mortgage Bonds of Company at their par value, and 20 per cent. reserved from monthly estimates until contracts are completed.

D. S. WALTON, Chief Eng'r.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPANY,
44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES OR SEPARATE,
CANNON AND PR JECTILES, ALL KINDS
IRON AND BRAS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO.,

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS,

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

16 CLIFF STREET, NEW YORK.

42 BATTERYMARCH ST., Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST., Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff St., N. Y.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

HUSSING, CROCKER & DODGE,
23 Cliff St.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William St., N. Y.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall St., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

H. WILKINSON, Secy,
Wheeling, Va.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Eric Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA

IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

By the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed elsewhere. These Works have been greatly enlarged the past year, and are therefore prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, CAR AXLES, SPIKES, and Merchant Iron. They have on hand rails for T Rails, of the following weights per lineal yard viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID B. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

WOOD, MORRELL & CO.

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut St.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL,
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL,
CAR SPRING STEEL,
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff St., New York.

THE

RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

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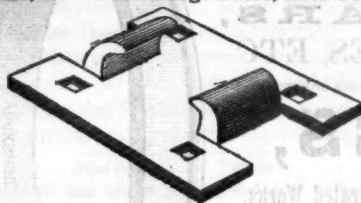
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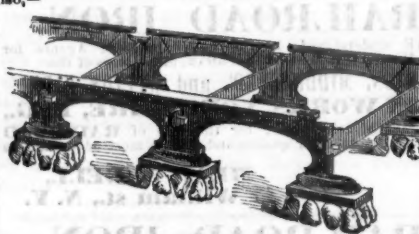
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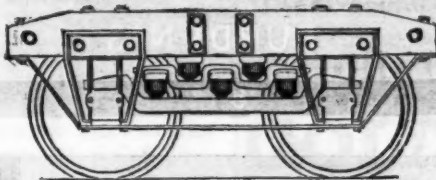
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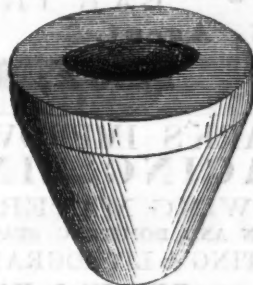
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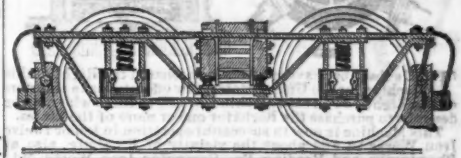
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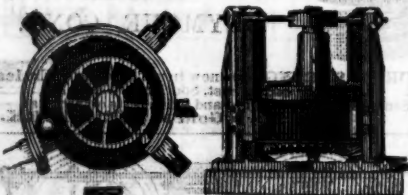
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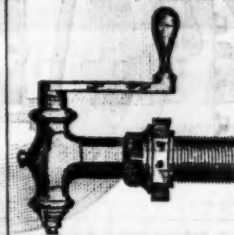
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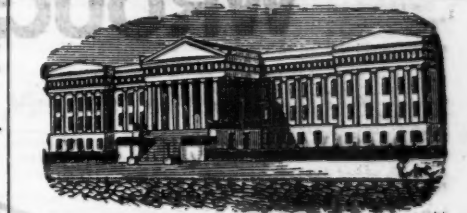
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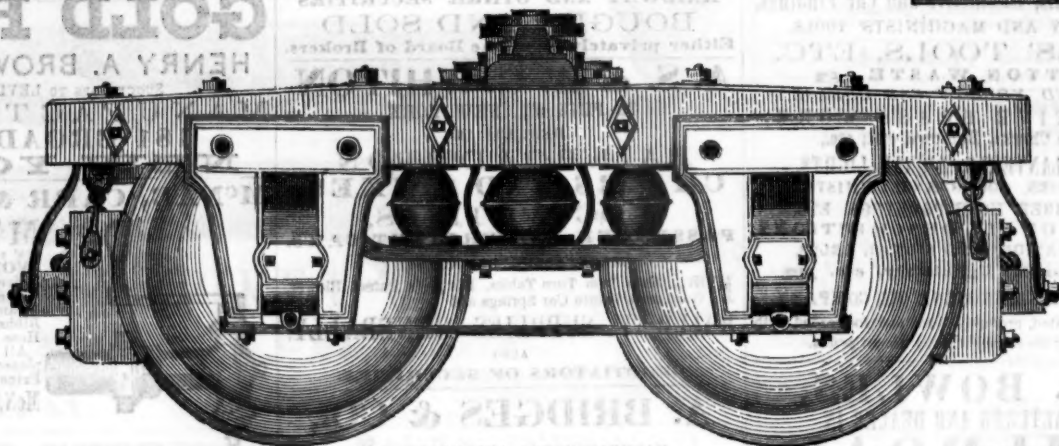
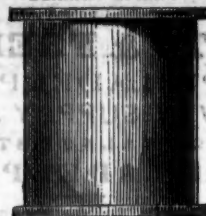
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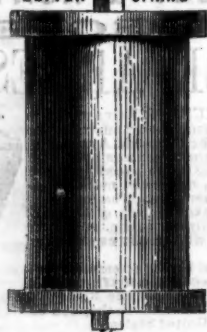
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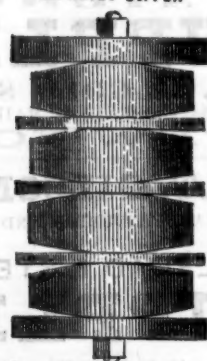


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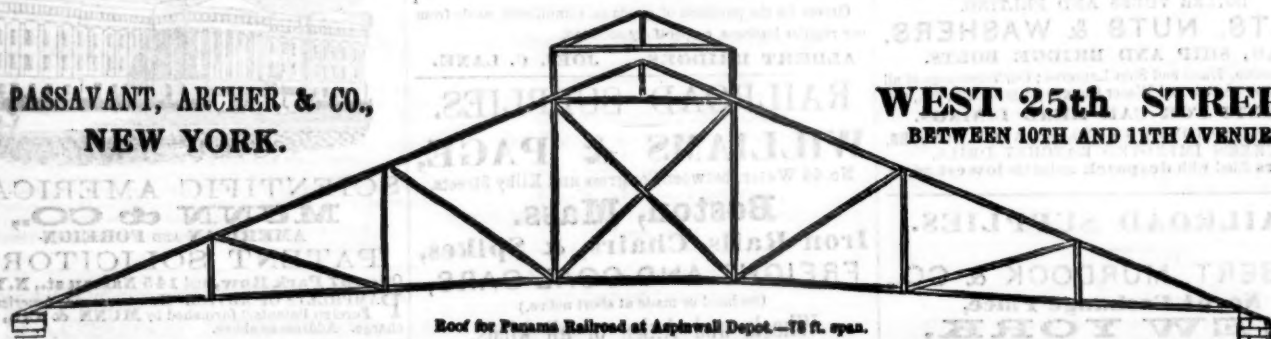


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